***Opening Remarks of***
***Congressman Tom Feeney (R-FL)***
*Markup of H. Res. 487 – Recognizing the Contribution of Modeling and Simulation Technology*
*June 22, 2007*

This morning's markup of H. Res. 487 recognizes that modeling and simulation technology is a National Critical Technology essential for America's long-term national security and economic prosperity.

Congressman Randy Forbes -- a former member of this Committee and current Chairman of the Modeling and Simulation Caucus – introduced this legislation. I -- as a member of that caucus and representing one of the larger modeling and simulation clusters in the United States – am honored to urge that this Committee pass this legislation.

Your child's or grandchild's video game represents one product of the modeling & simulation industry. Aircraft training simulators provide another well-known example.

I don't know if Ranking Member Ralph Hall used the Link Trainer as he prepared for World War II service. But that rather rudimentary flight simulator helped train a generation of military pilots and laid the foundation for this technology.

Simulation uses combinations of sound, sight, and motion to make you feel that you are experiencing an actual event. Modeling involves the complex computer models used to create these artificial environments.

For training purposes, modeling and simulation places people in an artificial – but seemingly real – environment and puts them through their paces. But unlike "live" training, if you make a mistake, you get to live another day and learn valuable lessons. An inestimable number of lives have been saved that otherwise might have been lost in training accidents while improving the overall quality of training.

In the later part of the 20th Century, the U.S. military revolutionized warfighting by emphasizing high-fidelity training that simulates the stress and decision making of actual combat. Servicemen and women gain experience and judgment previously only earned on the actual battlefield.

Substantial amounts of that simulation and training came from my Congressional District where representatives of all service branches collaborate with the University of Central Florida and private contractors of all sizes to produce these training systems. Other clusters of modeling and simulation excellence exist throughout the United States.

But such training expands far beyond military uses. Medical simulation is an especially promising field. By creating artificial but seemingly real environments, doctors and

nurses can hone their skills in using sophisticated and invasive medical technology or in treating severely injured patients.

Beyond training, modeling and simulation replicates complex environments – allowing planners and designers to ask various "what if" questions. Transportation planners simulate highway networks to determine how to best alleviate congestion. The Illinois State Toll Highway Authority uses simulation to determine how to improve highway signage and reduce crashes near toll plazas.

Emergency management experts simulate large scale natural or man-made disasters to better improve coordinated emergency responses. Hurricane Katrina highlighted the need to better utilize modeling and simulation in order to protect life and property.

Because of these growing number of uses, the modeling and simulation industry is rapidly growing and demands the best of students with extensive math and science backgrounds including psychology, medicine, computer science, mathematics, engineering and physics.

In these brief remarks, I've used examples of modeling and simulation technology to illustrate its value in our complex and dynamic world. So I urge you to support this resolution that recognizes this National Critical Technology and urges governmental action in the areas of industry classification codes and intellectual property to strengthen America's lead in this technology.